

REMARKS

Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1, 5-11, and 20-23 are pending.

Amendments to the Claims

Claims 1, 5-11, and 20-23 have been examined, with no claims being allowed. Applicants have amended Claims 1 and 20 to replace the Markush group with “or” terminology.

No new matter has been added by this Amendment. No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims also remains unchanged.

Claim Rejections - 35 U.S.C. §112

The rejection of Claims 1, 5-11, and 20-23 under 35 U.S.C. §112, second paragraph, as being indefinite is respectfully traversed.

Claims 1 and 20 each included the following Markush group:

wherein the polypropylene is selected from the group consisting of propylene homopolymers, copolymers containing up to about 10% by weight ethylene, and C₄-C₂₀ alpha-olefin comonomers

The concept of a Markush group is explained in MPEP 2173.05(h), which states that one acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being “selected from the group consisting of A, B and C.”

While the existing language in Claims 1 and 20 is a classis Markush group, which is a common format of an alternative expression clearly understood by those familiar with patent practice, Applicants have amended Claims 1 and 20 to instead include “or” terminology, which is also explained in MPEP 2173.05(h). Simply stated, the polypropylene is either a propylene homopolymer, or a copolymer containing up to about 10% by weight ethylene, or a C₄-C₂₀ alpha-olefin comonomer.

Applicants respectfully submit that, in view of the amendment to Claims 1 and 20 and the explanation provided above, the language in independent Claims 1 and 20 clearly conveys to a person skilled in the art the subject matter which Applicants regard as the invention. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim Rejections - 35 U.S.C. §103

The rejection of Claims 1, 5-11, and 20-23 under 35 U.S.C. §103(a) as being unpatentable over Gutweiler et al. (U.S. Patent No. 5,514,752, hereinafter "Gutweiler") is respectfully traversed.

Applicants maintain that Gutweiler fails to disclose or suggest polypropylene fibers *that have been strengthened with an ethylene-propylene-diene-monomer impact modifier*, wherein the impact modifier has elastomeric properties and accounts for 1-25% or 0.59-4% by weight of the fiber, as recited in Applicants' Claims 1 and 20. Furthermore, the inclusion of polyvinyl butyral, as required by Gutweiler, would not achieve the softness of Applicants' claimed invention.

As explained previously by Applicants, the basic and novel characteristics of Applicants' claimed impact modified fibers are the lack of melt elasticity combined with plasticization for improved fabric softness. More particularly, the lack of melt elasticity contributes to softness by reducing roping and entanglement of fibers, while the plasticization effect contributes to softness by reducing the hardness and brittleness of fibers. A prior art additive that undermines or defeats this combination of properties would not anticipate or render obvious Applicants' claimed invention.

More particularly, Applicants' Claim 1 is directed to a polypropylene textile fiber that is strengthened by about 0.59-4% by weight EPDM impact modifier. Similarly, Applicants' Claim 20 is directed to a nonwoven fabric that includes a plurality of modified polypropylene fibers that are strengthened with about 1-25% by weight EPDM impact modifier. Claims 1 and 20 both recite elastomeric properties of the EPDM and quantifiable softness properties of the strengthened fibers. While the claim language does not explicitly exclude other chemical components in the polypropylene composition, the claim language does limit the composition by

excluding any other chemical components, applications, or processes that would prevent the polypropylene from being formed into fibers, specifically fibers having the recited softness properties.

In response to the Examiner's comment that it is the structural or chemical elements, not the properties, that impart patentability, Applicants note that Claims 1 and 20 specifically recite "fibers," which are structural limitations. As for the softness limitations in Claims 1 and 20, these limitations set a definite boundary on the patent protection sought. As stated in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 29 (1997), "Each element contained in a patent claim is deemed material to defining the scope of the patented invention."

While the impact-modified polypropylene fibers of Applicants' invention are characterized by improved softness, a primary objective of Gutweiler et al. is to provide polyvinyl butyral-containing compositions having high rigidity and hardness. The stated features of high rigidity and hardness would plainly defeat, and/or materially affect, the improved fabric softness achieved by Applicants. Since Gutweiler strives to achieve a completely different result, i.e., hardness, and achieves this hardness through the inclusion of polyvinyl butyral in a polypropylene composition, there is no suggestion or motivation in Gutweiler to modify the composition in Gutweiler to achieve Applicants' claimed invention.

As Applicants have repeatedly pointed out, a case on point is *In Re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA, 1964), in which the Court stated that the Examiner has the burden of establishing a motivation for modifying the prior art reference to make the claimed invention. Similar to the fact pattern in *In Re De Lajarte*, the Examiner in the instant prosecution has failed to suggest any reason for omitting one of the primary elements (i.e., polyvinyl butyral) from the prior art composition. Furthermore, the Examiner has produced no evidence that the impact-modified polypropylene of Gutweiler possesses improved softness, which is a primary feature of Applicants' claimed composition. Gutweiler teaches that the opposite is true, and the composition disclosed in Gutweiler is hard and brittle.

In response to the Examiner's assertion that Applicants have not provided adequate support to illustrate the effects an additive would have on the properties of

the blend of polypropylene and EPDM, Applicants respectfully submit that Gutweiler provides such support. More particularly, Gutweiler illustrates the effects that polyvinyl butyral has on the properties of the blend of polypropylene and EPDM, which is an increase in rigidity and hardness and satisfactory adhesion to coating compositions.


The Examiner refers to the prior art section in Col. 1, lines 12-16, in which Gutweiler mentions that high-impact polypropylene *molding compositions* are known in principle, and that they are prepared by mixing polypropylene and a rubber, such as, for example, EPDM. Gutweiler fails to disclose or suggest any strengthened *fibers* or *nonwoven fabrics* comprising strengthened fibers in the prior art having the composition and properties of Applicants' claimed fibers.

Applicants respectfully submit that the above arguments fully comply with 37 CFR 1.111(a), (b), and (c). For at least the reasons given above, Applicants respectfully submit that the teachings of Gutweiler fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

Applicants believe that this case is now in condition for allowance. If the Examiner feels that any issues remain, then Applicants' undersigned attorney would like to discuss the case with the Examiner. The undersigned can be reached at (847) 490-1400.

Respectfully submitted,


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